

Amendments to the Drawings:

Please substitute the enclosed FIGS. 1 and 4-7 for the FIGS. 1 and 4-7 currently on file. No new matter has been added.

REMARKS/ARGUMENTS

Reconsideration of this patent application is respectfully requested in view of the foregoing amendments, and the following remarks. The drawings, specification, and claims 15-24 have been amended. Claim 14 has been canceled and rewritten as new claim 25. No new matter has been added.

The Examiner objected to the Information Disclosure Statement for lacking a listing of references and copies of some of the references. Applicants submit herewith a PTO Form 1449 containing the list of references. Applicants understand that copies of the missing references have already been provided by the Examiner, so no further copies are needed.

The Examiner objected to the Drawings for not showing the contacting or switching elements and for containing reference numerals not described in the specification. Applicants submit herewith Amended Figures 1, 4 and 7, in which the contacting or switching elements are shown, and the additional reference numerals deleted. The specification has been amended to include new reference numeral 48.

The Examiner objected to the specification for lacking

proper headings and for some typographical errors. Applicants have amended the specification to insert the proper headings and to correct the typing errors. Applicants also submit herewith a new Abstract which complies with PTO requirements.

The Examiner rejected claims 14-24 under 35 USC §112 for being indefinite. Applicants have canceled claim 14 and have rewritten it as new claim 25, which is believed to meet the requirements of 35 USC §112. Applicants have amended claims 15-24 to depend from new claim 25, to delete the reference numerals and to further clarify the invention. It is believed that the claims are now in compliance with 35 USC §112.

The Examiner rejected claims 14-24 under 35 USC §103 as being unpatentable over JP 8-90481 in view of GB 2 118 524. Applicants respectfully traverse. JP 8-90481 shows an external contact detecting device being applied to a welding torch and being capable of detecting external contact against an external force of the welding torch. The construction according to this document differs from the present invention, since it is not an independent device but rather an integration of the welding torch. It is not easy to flexibly use the switch-off device according to JP 8-90481 at any desired side or position of the robot system. Furthermore, the switch-off device according to JP

8-90481 is not configured in a simple manner. Finally, this document teaches a device that indirectly activates a switch 110 via an element between the welding torch and this switch, thus adversely affecting the switch-off behavior.

As can be seen from Figure 3 of JP 8-90481, the electrical connection of the contact tube of the welding torch is done outside of the switch-off device and the welding torch. This makes it difficult to mount and demount the welding torch, and further can be hindering when manipulating the robot system.

The switch-off box according to the present application has a coupling means which allows electric current flow to the contact tube of the welding torch. Further, the coupling means has channels whereby the supplied media, such as for instance cooling liquid, protective gas, etc. may be transferred from one side of the coupling means to its other side. The switch-off box according to the present invention can be easily connected with the torch body and the hose pack on the other side. The connection with the hose pack ensures that the weight of the hose pack will not directly act on the coupling means, but will be transmitted onto the housing of the switch-off box. The present switch-off box will take up the weight of the components, and the resiliently mounted coupling means of the switch-off box need

only be dimensioned to fit the weight of the torch body. The punctual contact of the coupling means on the housing ensures the rapid response behavior of the switch-off box, since at the occurrence of a collision, such a collision will be immediately detected by the opening of the punctual contact and the respective control of the robot system will be enabled by the appropriate arrangement of contacting elements or switching elements.

The second document cited, GB 2 118 524 A, shows a similar construction to that of JP 8-90481A, with the same disadvantages and differences from the present invention.

Therefore, combining the two would not lead to the present invention, because neither reference teaches or suggests the features of claims 15-25.

Accordingly, Applicant submits that claims 15-25 are patentable over the cited references, taken either singly or in combination. Early allowance of the amended claims is respectfully requested.

Respectfully submitted,
MANFRED HUBINGER



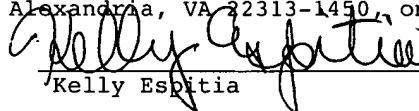
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Enclosure: Three (3) sheets of Replacement Drawings and PTO Form 1449

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: MAIL STOP AMENDMENT, Commissioner of Patents, U.S. PTO, P.O. Box 1450, Alexandria, VA 22313-1450, on January 29, 2007.


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